

WHAT IS CLAIMED IS:

1. A system for charging or maintaining a charge of a battery of a gasoline-powered vehicle, comprising:
 - an energy-transforming cell that can convert light energy received from a light source into electrical current;
 - a switch for controlling flow of current to a battery of a vehicle;
 - a battery connector that electrically communicates the battery with the switch; and
 - an electrical connector, in electrical communication between the cell and the switch, for communicating electrical current from the cell to the switch;wherein a charge of the battery is maintained or increased when the cell converts light incident upon the cell into electrical current.
2. The system of claim 1, further comprising:
 - a translucent sheet positioned on the cell for protecting the cell from contaminants without completely blocking light influx onto the cell.
3. The system of claim 1, wherein the cell is supported by a material support, the material support comprising:
 - a portable device capable of being reversibly contacted with the vehicle.
4. The system of claim 3, wherein the portable device is a sunshade.

5. The system of claim 3, wherein the portable device is a vehicle cover.
6. The system of claim 1, wherein the cell is supported by a material support, the material support comprising:

a permanently fixed device integral to the vehicle.
7. The system of claim 6, wherein the permanently fixed device is a sunroof.
8. The system of claim 6, wherein the permanently fixed device is a dashboard.
9. The system of claim 1, wherein the cell is supported by a material support, the material support comprising:

a permanently fixed device separate from the vehicle.
10. The system of claim 9, wherein the permanently fixed device is a wall of a building.
11. The system of claim 9, wherein the permanently fixed device is a roof of a building.

12. The system of claim 1, wherein the cell comprises a photovoltaic cell.
13. The system of claim 12, wherein the photovoltaic cell is covered by a protective translucent cover.
14. The system of claim 12, wherein a plurality of photovoltaic cells are supported on a front side of a sunshade, each photovoltaic cell having a corresponding electrical connection on a back side of the sunshade leading to the electrical connector.
15. The system of claim 1, wherein the switch comprises a receiving socket for receiving the electrical connector.
16. The system of claim 15, wherein the receiving socket is a cigarette lighter socket.
17. The system of claim 1, wherein the switch comprises a variable current flow switch for controlling a variable rate of current flow to the battery.
18. The system of claim 1, wherein the switch comprises an on/off switch for allowing either a full flow of current to the battery or no flow at all.

19. A system for charging or maintaining a charge of a battery of a gasoline-powered vehicle, comprising:

a plurality of energy-transforming cells that can convert light energy received from a light source into electrical current, each cell having an electrical connection for directing the electrical current out of the cell;

a switch for controlling flow of current to a chargeable battery of a vehicle;

a battery connector that electrically communicates the battery with the switch; and

an electrical connector, connected to the plurality of cells through the plurality of electrical connections, for communicating electrical current from the plurality of cells to the switch;

wherein a charge of the battery is maintained or increased when light is incident upon the cell and converted into electrical current.

20. The system of claim 19, further comprising:

a translucent sheet positioned on the plurality of cells for protecting the plurality of cells from contaminants without completely blocking light influx onto the plurality of cells.

21. The system of claim 19, wherein the plurality of cells comprise a plurality of photovoltaic cells.

22. The system of claim 21, wherein each of the photovoltaic cells is covered by a protective translucent cover.

23. The system of claim 21, wherein the plurality of photovoltaic cells are supported on a front side of a sunshade, each photovoltaic cell having a corresponding electrical connection on a back side of the sunshade leading to the electrical connector.

24. The system of claim 19, wherein the switch comprises a receiving socket for receiving the electrical connector.

25. The system of claim 24, wherein the receiving socket comprises a cigarette lighter receiving socket.

26. The system of claim 19, wherein the switch comprises a variable current flow switch for controlling a variable rate of current flow to the battery.

27. The system of claim 19, wherein the switch comprises an on/off switch for allowing either a full flow of current to the battery or no flow at all.

28. A system for charging or maintaining a charge of a battery of a vehicle, comprising:

a gasoline-powered vehicle having a chargeable battery;

a plurality of energy-transforming cells that can convert light energy received from a light source into electrical current, each cell having an electrical connection for directing the electrical current out of the cell;

a switch for controlling flow of current to the battery;

a battery connector that electrically communicates the battery with the switch; and

an electrical connector, connected to the plurality of cells through the plurality of electrical connections, for communicating electrical current from the plurality of cells to the switch;

wherein a charge of the battery is maintained or increased when light is incident upon the cell and converted into electrical current.

29. The system of claim 28, further comprising:

a translucent sheet positioned on the cells for protecting the cells from contaminants without completely blocking light influx onto the cells.

30. The system of claim 28, wherein the cells are supported by a material support, the material supporting comprising:

a portable device capable of being reversibly contacted with the vehicle.

31. The system of claim 30, wherein the portable device is a sunshade.
32. The system of claim 30, wherein the portable device is a vehicle cover.
33. The system of claim 28, wherein the cells are supported by a material support, the material support comprising:
- a permanently-fixed device integral to the vehicle.
34. The system of claim 33, wherein the permanently fixed device is a sunroof.
35. The system of claim 33, wherein the permanently fixed device is a dashboard.
36. The system of claim 28, wherein the wherein the cells are supported by a material support, the material support comprising:
- a permanently-fixed device separate from the vehicle.
37. The system of claim 36, wherein the permanently fixed device is a wall of a building.

38. The system of claim 36, wherein the permanently fixed device is a roof of a building.

39. The system of claim 28, wherein the cells comprise a plurality of photovoltaic cells.

40. The system of claim 39, wherein the plurality of photovoltaic cells are covered by a protective translucent cover.

41. The system of claim 40, wherein the plurality of photovoltaic cells are supported on a front side of a sunshade, each photovoltaic cell having a corresponding electrical connection on a back side of the sunshade leading to the electrical connector.

42. The system of claim 28, wherein the switch comprises a receiving socket for receiving the electrical connector.

43. The system of claim 42, wherein the receiving socket comprises a cigarette lighter receiving socket.

44. The system of claim 28, wherein the switch comprises a variable current flow switch for controlling a variable rate of current flow to the battery.

45. The system of claim 28, wherein the switch comprises an on/off switch for allowing either a full flow of current to the battery or no flow at all.

46. A system for charging or maintaining a charge of a battery of a gasoline-powered vehicle, comprising:

means for converting light energy received from a light source into electrical current;

means for communicating electrical current from the converting means with a battery of a vehicle; and

means for controlling the rate of current flowing into the battery;

wherein a charge of the battery is maintained or increased when the cell converts light incident upon the cell into electrical current.

47. The system of claim 46, further comprising:

means for protecting the converting means from contaminants without completely blocking light influx onto the converting means.

48. A method of charging or maintaining the charge of a battery of a gasoline-powered vehicle, comprising:

exposing an energy-transforming cell to a light source, the cell being able to convert light energy received from a light source into electrical current; and

communicating the electrical current produced by the cell with the battery using an electrical connector, thereby maintaining the charge of the battery.

49. A method of charging or maintaining a charge of a battery of a gasoline-powered vehicle, comprising:

providing a vehicle having a chargeable battery and a system for maintaining a charge of the battery, the system comprising:

an energy-transforming cell that can convert light energy received from a light source into electrical current;

an electrical connector for communicating electrical current from the cell with the battery; and

a switch for controlling flow of electrical current to the battery;

exposing the cell to a light source; and

enabling the switch to allow current flow from the cell to the battery thereby maintaining the charge of the battery.

50. The method of claim 49, wherein the switch comprises a receiving socket for receiving the electrical connector.

51. The method of claim 50, wherein the receiving socket comprises a cigarette lighter receiving socket.

52. The method of claim 49, wherein the switch comprises a variable current flow switch for controlling a variable rate of current flow to the battery.

53. The system of claim 49, wherein the switch comprises an on/off switch for allowing either a full flow of current to the battery or no flow at all.